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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/576,315	05/22/2000	Takayuki Yanagisawa	54-209P	1809

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EXAMINER

VY, HUNG T

ART UNIT PAPER NUMBER

2828

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/576,315

Applicant(s)

YANAGISAWA ET AL.

Examiner

Hung T Vy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.



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**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1) ☒ Certified copies of the priority documents have been received.  
2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7. 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. In response to the communications dated 05/22/2000, claims 1-29 are pending in this application as a result of the addition of claims 21-29.

### **Acknowledges**

2. Receipt is acknowledged of the following items from the Applicant.

Information Disclosure Statement (IDS) filed on 05/22/2000 and made of record as Paper No. 7. The references cited on the PTOL 1449 form have been considered.

### **Foreign Priority**

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 01/12/1998.

### **Specification**

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4. The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any error of which applicant may become aware in the specification.

### **Claim Rejections - 35 USC § 112**

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13, 20 and 21 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the phrase "a two-sided reflecting surface on one surface" renders the claim indefinite because it is unclear. What does "two-sided... surface on one surface" mean?. See MPEP § 2173.05(d).

Regarding claims 20, 21 the phrase "first and second ridges of the first and second prisms **are eliminated**" is inconsistent with specification. Paper 34 of the specification states that "in a self-compensating laser resonator constructed as above, the ridge portions 21c, 22c of the flat reflecting mirror mirrors 125, 127 **may be eliminated**".

### **Claim Rejections - 35 USC § 102**

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 19 is rejected under 35 U. S. C. § 102 (b) as being anticipated by U.S. patent No. 4,677,639 to Sasser.

Regarding to claim 19 Du et al. disclose a self-compensating laser resonator comprising:

a first prism (172) having first (176) and second reflecting surfaces (177) disposed at right angles to each other and a first incident surface (178) of the laser beam;

a second prism (173) facing said first prism and having third (191) and fourth reflecting surfaces (192) disposed at right angles to each other and a second incident surface (193) of the laser beam, and comprising a ninth two-sided reflecting surface (118,119) on an optical path of the laser beam incident on the second incident surface; a laser medium (162) provided between said first and third reflecting surface; and a light source (163) for exciting said laser medium (162), wherein, a second ridge formed by two planes comprising said third and fourth reflecting surfaces is on a plane substantially orthogonal to a first ridge formed by two planes comprising said first and second reflecting surfaces, characterized in that, a laser beam emanating from the laser medium and traveling toward said first reflecting surface is successively reflected by the

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first, second, third, fourth, second, first, ninth two-sided, first, second, fourth, third, second and first reflecting surfaces to again enter the laser medium, passes through the laser medium, and is further successively reflected by the third, fourth, ninth two-sided, fourth and third reflecting surfaces to once again enter the laser medium (See column 11 line 44 – 50 and Fig. 10 and Fig 9).

### Claim Rejections - 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, ~~3~~<sup>3, 10</sup>, 16, 17, ~~and 18~~<sup>18 and 20</sup> are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. patent No. Du et al., U.S. Patent No. 5,148,443 in view of 4,910,746 to Nicholson.

Regarding to claim 1, ~~3~~<sup>3, 10</sup>, 16, ~~and 17~~<sup>17, 18 and 20</sup> Du et al. disclose a self-compensating laser resonator comprising:

a first reflecting apparatus (M1) comprising a first reflecting surface and a second reflecting surface disposed at a right angle to each other; a second reflecting apparatus (M2) facing said first reflecting apparatus and comprising a third reflecting surface and

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a fourth reflecting surface disposed at a right angle to each other (see column 4, line 32 – 36, fig. 1);

A second ridge formed by two planes comprising said third and fourth reflecting surfaces is on a plane substantially orthogonal to a first ridge formed by two planes comprising said first and second reflecting surfaces (Fig 1).

A laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, second, first, fourth and third reflecting surfaces to again enter said laser medium (See column 1 line 5 – 11 and fig. 1).

A self-compensating laser resonator characterized in that, a beam diameter converting device for converting a beam diameter of a laser beam is provided (See column 9 line 7 – 9 and column 10 line 1 – 4).

First and second reflecting apparatuses each have two flat reflecting mirrors disposed at a right angle to each other (Fig. 1) and a gap there between and are joined to one another by means of a joining member (Fig. 1).

Du et al do not disclose a laser medium provided between said first reflecting surface and said third reflecting surface; and a light source for exciting said laser medium. However, because Nicholson discloses the a self-compensating laser resonator comprising a laser medium (50) provided between said first reflecting surface (70) and said third reflecting surface (72); and a light source (22) for exciting said laser medium (See column 5, line 14 - 24 and Fig 1,2, 3).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the self-compensating laser resonator of Du et al to have a laser medium provided between first reflecting apparatus and second reflecting apparatus as that of Nicholson, because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of, but further to obtain the best result, the invention of Du et al.

9. Regarding to claim 2, and 18 Du et al. disclose a self-compensating laser resonator but Du et al. do not disclose a laser beam to pass there-through in only one direction is provided in an optical path of said a laser beam, and said first reflecting apparatus and second reflecting apparatus each comprise a prism having two reflecting surfaces disposed at right angles to each other and an incident surface of the laser beam. But Nicholson disclose a laser beam to pass there-through in only one direction is provided in an optical path of said a laser beam. (See column 5, line 51 – 57 and Fig 3) and said first reflecting apparatus and second reflecting apparatus each comprise a prism (70,72) having two reflecting surfaces disposed at right angles to each other and an incident surface of the laser beam (Fig. 3).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the self-compensating laser resonator of Du et al to have a laser as a laser beam to pass there-through in only one direction is provided in an optical path of said a laser beam and first reflecting apparatus and second reflecting apparatus each comprise a prism having two reflecting surfaces disposed at right angles to each other and an incident surface of the laser beam that of



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Nicholson, because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of, but further to obtain the high performing, the invention of Du et al.

10. Claim 3 is rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. patent No. Du et al., U.S. Patent No. 5,148,443 in view of 5,894,493 to Sukhman et al.

Regarding to claim 3, Du et al. disclose a self-compensating laser resonator but Du et al. do not disclose a partially reflective mirror used for laser output is provided at any one of said first to fourth reflecting surfaces. However, because Sukhman discloses a partially reflective mirror (15) used for laser output (See column 6, line 27 – 28 and Fig. 1).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the self-compensating laser resonator of Du et al to have a partially reflective mirror used for laser output is provided at any one of said first to fourth reflecting surfaces (M1 or M2) that of Sukhman et al., because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of the invention of Du et al.

11. Claims 4,5,6,7,8,9,22,23,24,25,26, and 27 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. patent No. Du et al., U.S. Patent No. 5,148,443 in view of 4,910,746 to Nicholson and U.S. Patent No. 6,084,682 to Zare et al.

Regarding to claims 4, 5,6,7,8,9,22,23,24,25,26,27 Du et al. disclose a self-compensating laser resonator but Du et al. do not disclose polarizing reflecting means for selectively allowing to pass there-through to be output to an outside portion any one

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of a P polarization component and an S polarization component of a laser beam while reflecting said other component is provided at any one of said first to fourth reflecting surfaces, or to be output to an outside portion and polarization component adjusting means for dividing said laser beam relative to said polarizing reflecting means into said P polarization component and Faraday rotator and half wave plate, and said S polarization component at an arbitrary ratio is provided in an optical path of said laser beam and polarization component adjusting means is a half wave plate, and adjusting means is a birefringent optical element capable of achieving a birefringence effect in accordance with an applied voltage, and a Seeder light generating apparatus for making Seeder light incident in an optical path of a laser beam reflected from said polarization reflecting means is provided polarization component adjusting means is a birefringent optical element capable of achieving a birefringence effect in accordance with an applied voltage. But Nicholson discloses laser beam to pass there-through to be output (See column 5, line 51 – 57 and Fig 3) and additional that Zare et al. disclose a self-compensating laser (40) resonator that polarization reflecting for selectively allowing to pass to be output to an outside portion any one of a P polarization component (32b) and an S polarization component (32a) of a laser beam while reflecting said other component is provided at any one of said first to fourth reflecting surfaces or to be output to an outside portion (See column 4 line 22 - 33 and Fig. 1), and Faraday rotator( isolator 4) and half wave plate (57,60a) ( See column 4 line 23 – 28 and Fig. 1) and polarization component adjusting means for dividing said laser beam relative to said polarizing reflecting means into said P polarization component and said S

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polarization component at an arbitrary ratio is provided in an optical path of said laser beam (24) (See column 5 line 31 – 34 and Fig 1) and polarization component adjusting means is a half wave plate (See column 4 line 26 – 27 and Fig 1) and adjusting means is a birefringent optical element capable of achieving a birefringence effect in accordance with an applied voltage (See column 5 line 29 – 34 and Fig 1b) and a seeder light generating apparatus cause monochromatic light ( See column 3 line 34 - 35 and Fig 1b) for making Seeder light incident in an optical path of a laser beam reflected from said polarization reflecting means is provided and polarization component adjusting means is a half wave plate) ( See column 4 line 23 – 28 and Fig. 1).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the self-compensating laser resonator of Du et al to have a self-compensating laser resonator that polarization reflecting for selectively allowing to pass to be output to an outside portion any one of a P polarization component and an S polarization component of a laser beam while reflecting said other component is provided at any one of said first to fourth reflecting surfaces or to be output to an outside portion, and Faraday rotator and half wave plate and polarization component adjusting means for dividing said laser beam relative to said polarizing reflecting means into said P polarization component and said S polarization component at an arbitrary ratio is provided in an optical path of said laser beam and polarization component adjusting and a seeder light generating apparatus that of Zare et al, because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of the invention of Du et al.

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12. Claims 11, 12, ~~13~~<sup>13'</sup>, 14, 15, 28, and 29 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. patent No. Du et al., U.S. Patent No. 5,148,443 in view of 4,677,639 to Sasser.

Regarding to claims 11, 12, ~~13~~<sup>13'</sup>, 14, 15, 28, 29 Du et al. disclose a self-compensating laser resonator comprising:

A first reflecting apparatus (M1) having a first reflecting surface and a second reflecting surface disposed at a right angle to each other;

A second reflecting apparatus (M2) facing said first reflecting apparatus and having a third reflecting surface and a fourth reflecting surface disposed at a right angle to each other;

A second ridge formed by two planes comprising said third and fourth reflecting surfaces is on a plane substantially orthogonal to a first ridge formed by two planes comprising said first and second reflecting surfaces,

Du et al do not disclose a third reflecting apparatus provided between said second and fourth reflecting surfaces, having a fifth reflecting surface and a sixth reflecting surface disposed parallel to, and facing away from, each other; a laser medium provided between said first and third reflecting surfaces; and a light source for exciting said laser medium, wherein, characterized in that, a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, fifth, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, and is

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further successively reflected by said third, fourth, first, second, sixth, second, first, fourth and third reflecting surfaces to once again enter said laser medium, a self-compensating laser resonator according, said third reflecting apparatus comprises two single-sided reflecting mirrors mutually fixed by a holder and disposed such that reflecting surfaces thereof are parallel and face in opposite directions from each other. A laser medium having a seventh two-sided reflecting surface on an optical axis of a laser beam on one end surface thereof provided between said first and third reflecting surface, and a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, second, first, fourth, third and seventh two-sided reflecting surfaces, is further successively reflected by said third, fourth, first, second, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium and is reflected by said seventh two-sided reflecting surface and an optical component having an eighth two-sided reflecting surface (119,120) on an optical axis of a laser beam on one end surface thereof provided between second and fourth reflecting surfaces, wherein a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, eighth two-sided, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, is further successively reflected by said third, fourth, first and second reflecting surfaces to be incident on said optical component, and is further successively reflected by said eighth two-sided, second, first, fourth and third reflecting surfaces to once again enter the laser medium.

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However, because Sasser discloses a third reflecting apparatus (150) provided between said second and fourth reflecting surfaces, having a fifth reflecting surface (118) and a sixth reflecting surface (119) disposed parallel to, and facing away from, each other (see column 9, line 59 – 6, column 10, line 15 – 38 and Fig.9); a laser medium provided between said first and third reflecting surfaces; and a light source for exciting said laser medium, wherein, as Du et al. disclose a laser beam traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, second, first, fourth and third reflecting surfaces to again enter said laser medium (See column 1 line 5 – 11 and fig. 1) then on Sasser discloses the third reflecting apparatus between second and fourth reflecting surfaces so a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, fifth, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, and is further successively reflected by said third, fourth, first, second, sixth, second, first, fourth and third reflecting surfaces to once again enter said laser medium, third reflecting apparatus (150) comprises two single-sided reflecting mirrors (118 and 119) mutually fixed by a holder (137, 138) and disposed such that reflecting surfaces thereof are parallel and face in opposite directions from each other (See column 9, line 59 – 64 and Fig. 9). A laser medium (175) having a seventh two-sided reflecting surface (199, 200) on an optical axis of a laser beam on one end surface thereof provided between said first and third reflecting surface (See column 12 line 35 – 38 and Fig. 10) and a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively

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reflected by said first, second, third, fourth, second, first, fourth, third and seventh two-sided reflecting surfaces, is further successively reflected by said third, fourth, first, second, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium and is reflected by said seventh two-sided reflecting surface ( See column 12 line 25 – 34). And an optical component having an eighth two-sided reflecting surface (119,120) (See column 9 line 59 – 63) on an optical axis of a laser beam on one end surface thereof provided between second and fourth reflecting surfaces, wherein a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, eighth two-sided, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, is further successively reflected by said third, fourth, first and second reflecting surfaces to be incident on said optical component, and is further successively reflected by said eighth two-sided, second, first, fourth and third reflecting surfaces to once again enter the laser medium ( See Fig 9).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the self-compensating laser resonator of Du et al to have a third reflecting apparatus provided between second and fourth reflecting surfaces, having a fifth reflecting surface and a sixth reflecting surface (119) disposed parallel to, and facing away from, each other ; a laser medium provided between said first and third reflecting surfaces; and a light source for exciting said laser medium, the third reflecting apparatus between second and fourth reflecting surfaces so a laser

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beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by first, second, third, fourth, fifth, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, and is further successively reflected by said third, fourth, first, second, sixth, second, first, fourth and third reflecting surfaces to once again enter said laser medium, third reflecting apparatus(150) comprises two single-sided reflecting mirrors (118 and 119) mutually fixed by a holder (137,138) and disposed such that reflecting surfaces thereof are parallel and face in opposite directions from each other. A laser medium (175) having a seventh two-sided reflecting surface (199,200) on an optical axis of a laser beam on one end surface thereof provided between said first and third reflecting surface and a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, second, first, fourth, third and seventh two-sided reflecting surfaces, is further successively reflected by said third, fourth, first, second, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium and is reflected by said seventh two-sided reflecting surface and an optical component having an eighth two-sided reflecting surface (119,120) on an optical axis of a laser beam on one end surface thereof provided between second and fourth reflecting surfaces, wherein a laser beam emanating from said laser medium and traveling toward said first reflecting surface is successively reflected by said first, second, third, fourth, eighth two-sided, fourth, third, second and first reflecting surfaces to again enter said laser medium, passes through said laser medium, is further successively reflected by



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said third, fourth, first and second reflecting surfaces to be incident on said optical component, and is further successively reflected by said eighth two-sided, second, first, fourth and third reflecting surfaces to once again enter the laser medium that of Sasser, because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of the invention of Du et al.

### **Citation of Pertinent References**

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Du et al. disclose laser, U.S. Patent No. 5,148,443.

The patent to Sasser discloses Laser Device ,U.S. Patent No.4,667,639.

The patent to Nicholson discloses Multiple Crystal Pumping Cavity Laser With thermal And Mechanical Isolation, U.S. Patent No. 4,910,746.

The patent to Waarts et al. disclose Frequency Converted Laser Diode And Lens System Therfor , U.S. Patent No. 5,321,718.

The patent to Zare et al. disclose Cavity-Locked ring Down Spectroscopy, U.S. Patent No. 6,084,682.

The patent to Shoshan discloses Low Divergence Laser Apparatus, U.S. Patent No.4,731,788.

The patent to Richman et al. disclose Apparatus and Methods For Using Achromatic Phase Matching at High Orders of Dispersion, U.S. Patent No.6,288,832

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### Conclusion


14. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung VY whose telephone number is (703) 605-0757. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hung T. Vy  
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